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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,633	06/27/2001	Richard C. Payne	GENP:101_US_	5630
24041	7590	01/31/2006	EXAMINER	
SIMPSON & SIMPSON, PLLC 5555 MAIN STREET WILLIAMSVILLE, NY 14221-5406			GRAHAM, CLEMENT B	
			ART UNIT	PAPER NUMBER
			3628	
DATE MAILED: 01/31/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/893,633

Applicant(s)

PAYNE, RICHARD C.

Examiner

Clement B. Graham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 14 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-23, remained pending in this Application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-23, are rejected under 35 U.S.C. 102(e) as being anticipated by Lange (U.S. Pub No 2002/0099640).

As per claim 1, Lange discloses a computer-based method for determining a value of a customized indexed call option, comprising:

a) searching a data structure based on a search criterion to determine at least one intermediate value of said customized indexed call option (see paragraph 0815, 0987, 0037, 0528 and 0687) and b) interpolating in said at least one intermediate value of said customized indexed call option based on a set of predetermined parameters of the customized indexed call option to find said value. (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687).

As per claim 2, Lange discloses wherein said search criterion comprises a set of predetermined parameters of the customized indexed call option. (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687).

As per claim 3, Lange discloses wherein said data structure is initialized based on a second predetermined set of parameters. (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687).

As per claim 4, Lange discloses an article of manufacture comprising a customized indexed call option with a specified term and specified notional amount n operatively arranged to allow an investor to choose notional amounts n_0 and n_1 at specified intervals within the term such that $n_0 \geq 0$, $n_1 \geq 0$, and $n_0 + n_1 \leq n$, while guaranteeing nonnegative total credited interest over the term, where interest credited on the notional amount n_0 is based upon an arbitrary but specified nonzero interest rate, and interest on the notional amount n_1 is credited

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based on changes in a specified index.(Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687).

As per claim 5, Lange discloses an article of manufacture comprising a customized indexed call option with a specified term and specified notional amount n operatively arranged to allow an investor to choose notional amounts n_i at specified intervals within the term such that i is an integer such that $0 < i < 41k$, $n_i \geq 0$, and $\sum n_i \leq n$, while guaranteeing nonnegative total credited interest over the term, where interest credited on the notional amount n_0 is based upon an arbitrary but specified nonzero interest rate, and interest on the notional amount n_i , $i > 1$, is credited based on changes in specified index i , where k , the number of specified indices, is an integer greater than or equal to one. (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687).

As per 6, Lange discloses a computer-based method for determining a value of a customized indexed annuity with guaranteed return amount G , comprising:

- a) determining a value of a customized indexed call option; and
- b) determining a present value of the guaranteed return amount G . (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687).

As per claim 7, Lange discloses a computer-based method for determining a value of a customized indexed certificate of deposit with guaranteed return amount G , comprising:

- a) determining a value of a customized indexed call option(see paragraph 0815, 0987, 0037, 0528 and 0687) and b) determining a present value of the guaranteed return amount G . (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687).

As per 8, Lange discloses a computer-based method for determining a value of a customized indexed life insurance policy with guaranteed return amount G , comprising:

- a) determining a value of a customized indexed call option(see paragraph 0815, 0987, 0037, 0528 and 0687) and b) determining a present value of the guaranteed return amount G . (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687).

As per claim 9, Lange discloses a computer-based method for determining a value of a customized indexed bond with guaranteed return amount G , comprising:

- a) determining a value of a customized indexed call option; and b) determining a present value of the guaranteed return amount G . (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687).

As per claim 10, Lange discloses a computer-based method for determining a value of a customized indexed call option, comprising:

- a) generating a first sample of index paths based on a first set of predetermined parameters;
- b) determining an optimal choice boundary maximizing an intermediate value of said customized indexed call option for such first sample of index paths (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687) and
- c) determining said value of said customized indexed call option from said determined optimal choice boundary and a second sample of index paths and a second set of predetermined parameters. (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687).

As per claim 11, Lange discloses a computer-based method for determining a value of a customized indexed call option as recited in claim 10 wherein said samples of index paths are randomly generated from distributions specified by the first set of predetermined parameters. (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687).

As per claim 12, Lange discloses wherein said samples of index paths are quasi-randomly generated from distributions specified by the first set of predetermined parameters. (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687).

As per claim 13, Lange discloses a wherein said first sample of index paths and said second sample of index paths are identical. (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687).

As per claim 14, Lange discloses a wherein said first sample of index paths and said second sample of index paths differ. (Note abstract and see paragraph 0815, 0987).

As per claim 15, Lange discloses wherein said samples of index paths are generated for one index. (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687).

As per claim 16, Lange discloses wherein said samples of index paths are generated for multiple indices. (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687).

As per claim 17, Lange discloses an apparatus for determining a value of a customized indexed call option, comprising:

- a) means for searching a data structure based on a search criterion to determine at least one intermediate value of said customized indexed call option (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687) and
- b) means for interpolating in said at least one intermediate value of said customized indexed call option based on a set of predetermined

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parameters of the customized indexed call option to find said value. (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687).

As per claim 18, Lange discloses wherein said means for searching a data structure comprises a general purpose computer specially programmed to search said data structure based on said search criterion to determine at least one intermediate value of said customized indexed call option. (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687).

As per claim 19, Lange discloses wherein said means for interpolating in said at least one intermediate value of said customized indexed call option comprises a general purpose computer specially programmed to perform said interpolation. (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687).

As per claim 20, Lange discloses an apparatus for determining a value of a customized indexed call option, comprising:

- a) means for generating a first sample of index paths based on a first set of predetermined parameters;
- b) means for determining an optimal choice boundary maximizing an intermediate value of said customized indexed call option for such first sample of index paths (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687) and c) means for determining said value of said customized indexed call option from said determined optimal choice boundary and a second sample of index paths and a second set of predetermined parameters. (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687).

As per claim 21, Lange discloses wherein said means for generating a first sample of index paths based on a first set of predetermined parameters comprises a general purpose computer specially programmed to generate said first sample of index paths. (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687).

As per claim 2, Lange discloses wherein said means for determining an optimal choice boundary maximizing an intermediate value of said customized indexed call option for such first sample of index paths comprises a specially programmed general purpose computer. (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687).

As per claim 23, Lange discloses wherein said means for determining said value of said customized indexed call option from said determined optimal choice boundary and a second sample of index paths and a second set of predetermined parameters comprises a specially

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programmed general purpose computer. (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687).

Conclusion

Response to Arguments

4. Applicant's arguments filed 11/14/05 has been fully considered but they are not persuasive for the following reasons.

5. In response to Applicant's arguments that Lange fail to teach or suggest "determining a value of a customized indexed call searching a data structure based on a search criterion to determine at least one intermediate value of said customized indexed call option interpolating in said at least one intermediate value of said customized indexed call option based on a set of predetermined parameters of the customized indexed call option to find said value and wherein said search criterion comprises a set of predetermined parameters of the customized indexed call option and wherein said data structure is initialized based on a second predetermined set of parameters and customized indexed call option with a specified term and specified notional amount n operatively arranged to allow an investor to choose notional amounts n_0 and n_1 at specified intervals within the term such that $n_0 \geq 0$, $n_1 \geq 0$, and $n_0 + n_1 \leq n$, while guaranteeing nonnegative total credited interest over the term, where interest credited on the notional amount n_0 is based upon an arbitrary but specified nonzero interest rate, and interest on the notional amount n_1 is credited based on changes in a specified index these limitations were disclosed as stated",

Lange discloses searching a data structure based on a search criterion to determine at least one intermediate value of said customized indexed call option (see paragraph 0815, 0987, 0037, 0528 and 0687 and interpolating in said at least one intermediate value of said customized indexed call option based on a set of predetermined parameters of the customized indexed call option to find said value. Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687 and wherein said search criterion comprises a set of predetermined parameters of the customized indexed call option. Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687 and wherein said data structure is initialized based on a second predetermined set of parameters. (Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687 an article of manufacture comprising a customized indexed call option with a specified term and specified notional amount n operatively arranged to allow an investor to choose notional amounts n_0 and n_1 at specified

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intervals within the term such that $n_0 \geq 0$, $n_1 \geq 0$, and $n_0 + n_1 \leq n$, while guaranteeing nonnegative total credited interest over the term, where interest credited on the notional amount n_0 is based upon an arbitrary but specified nonzero interest rate, and interest on the notional amount n_1 is credited based on changes in a specified index. Note abstract and see paragraph 0815, 0987, 0037, 0528 and 0687.

Therefore it is inherently clear that these limitation were addressed within the teachings of Lange.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clement B Graham whose telephone number is 571-272-6795. The examiner can normally be reached on 7am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on 703-308-0505. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 703-305-0040 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

CG

January 22, 2006


Clement B. Graham
Au 3628